

Draft Feasibility Study Identification of "COCs" and Contaminant Mobility Evaluation Criteria
Memorandum

General Comments:

1. CERCLA and the NCP addresses "hazardous substances, pollutants or contaminants: which EPA has reasonably narrowed to contaminants of concern (COCs) or contaminants of potential concern (COPCs). Further, the AOC and SOW for the Portland Harbor Superfund site both refer to investigating and addressing "hazardous substances, pollutants, or contaminants," "contaminants," or "contamination." Since the risk assessments will identify contaminants of concern, the Feasibility Study needs to use the correct terminology.
2. This memorandum does not discuss the COCs for the PRGs that the EPA has directed the LWG to use in the draft FS. There should be some discussion of this and that it is the subset of COCs being carried into the draft FS. EPA agrees that the LWG may present a risk management document that would assist EPA in determining if additional COCs need to be evaluated in the final FS.
3. The LWG has used the Human Health Ambient Water Quality Criteria (HH AWQC) for organism only in the screening approach. However, the designated use of the Lower Willamette River (Mouth to Willamette Falls, Including Multnomah Channel) (340-041-0340 Table 340A) indicates that public domestic water supply, private domestic water supply and water contact recreation are designated uses. This screen should also include a comparison to HH AWQC Water and Fish Ingestion numbers. EPA does not believe that this discrepancy in the use of HH AWQCs will result in a significantly different screening approach.

Specific Comments:

1. Page 1, Introduction, footnote 1. EPA disagrees that COCs are to be proposed in the LWG's risk management recommendation document. COCs are those contaminants that have been investigated, evaluated and determined **may be** posing unacceptable risk at the site. At this point, all the COCs in Table 4 are contaminants of concern. This list will be revised throughout the process to determine the COCs for the ROD.
2. Page 1, Introduction, 1 pp, 2nd sentence. This statement is inaccurate. The protectiveness determination should be based on the ability of the remedy to achieve the RAOs.
3. Page 1, Introduction, 1 pp. Between the 2nd and 3rd sentences, add "EPA will determine the COCs to conduct biological and environmental media monitoring to determine remedy success over time in the proposed plan."
4. Page 1, Objectives for Water Screening, 1st bullet. It should be clear that the purpose of screening the near-bottom surface water samples is to determine chemical mobility from a source. There should be a step in the process where it is determined whether the source (upland contaminated groundwater plume or contaminated sediments) is linked to the sample. This is important since it could be critical in determining the remedial action in that area (source control, dredging, type of cap, etc.).

5. Page 2, Objectives for Water Screening, last sentence. The generalized statement that “an FS typically” does this is not accurate and should be either clarified or removed.
6. Page 3, FS TZW Screening. It is inappropriate to only screen the TZW samples from depths less than 38 cm. All TZW samples should be screened since they represent the potential of contaminated groundwater to pose an unacceptable risk at the site and may require special design considerations in the draft FS (e.g., reactive cap vs. engineered cap, contaminant monitoring during dredging, etc.).
7. Page 2, FS Surface Water Screening, 1 pp. It is unclear why the LWG is proposing to screen individual samples one way and depth-integrated samples another. The same approach for screening should be used for both – screen against SDWA non-zero MCLGs, and in their absence, SDWA MCLs and tap water RSLs.
8. Page 3, FS TZW Screening. In the nine areas where TZW samples were collected because of expressed groundwater plumes, it is appropriate to use this methodology. However, there are many more groundwater plumes that may be expressing into the river sediments where pore water samples have not been collected. For areas outside groundwater plumes, the LWG has indicated that analytical results from bulk sediment samples would be used to evaluate potential toxicity in sediment pore water and there is no need to use equilibrium partitioning or any other method to estimate pore water concentrations where only sediment samples have been collected (i.e., no TZW samples). It is unclear how the LWG intends to evaluate TZW in other areas expressing groundwater plumes.
9. Page 6, Table 4. “Total Dioxin TEQ” should be “Total Dioxin/Furan TEQ.”
10. Page 6, Selection of Indicator Contaminants. It should be made clear that the indicator contaminants are those posing site-wide risks that will be used in the fate and transport model for contaminant mobility evaluation (i.e., time-to-recovery evaluation for FS). The memorandum should cite the documents used to develop these indicator contaminants and the development of the Fate and Transport Model. The second paragraph seems to indicate that they were developed based on mobility, toxicity, and persistence. While this may be true, these were not the only COCs that presented this and this list was developed based on negotiations between EPA and the LWG looking at COCs that were site-wide, bioaccumulated in tissue, and represented a chemical class of pollutants.
11. Page 7, Identification of Contaminant Mobility, 3rd bullet. This needs to state “SDWA non-zero MCLGs, and in their absence, SDWA MCLs and tap water RSLs” rather than “Drinking water MCLs”; statement in parenthesis is acceptable.
12. Page 7, Table 5. The title of the table should be “Indicator Contaminants Selected for Contaminant Mobility Evaluation in FS.”
13. Page 8, Table 6, Human Health Water Consumption column. This column should be comprised of SDWA non-zero MCLGs, and in their absence, SDWA MCLs and tap water RSLs” rather than just “Drinking water MCLs”.